

## Claims

1. Bipolar transistor, with  
an emitter area (3) which can be contacted electrically via  
5 an emitter electrode (1);  
a base area (4) which can be contacted electrically via a  
base electrode (2);  
a collector area (5) which can be contacted electrically  
via a collector electrode;  
10 wherein at least one electrode of the emitter, base and  
collector electrodes (1, 2) is a polysilicon layer, into  
which doping is inserted,  
characterized in that  
into the at least one electrode, in addition to the doping,  
15 impurity atoms with a density of  $10^{19} - 10^{21} \text{ cm}^{-3}$  are  
inserted, the impurity atoms being C, P or Ar atoms.
2. Bipolar transistor according to Claim 1,  
characterized in that  
20 the polysilicon layer is doped with boron atoms.
3. Bipolar transistor according to Claim 2,  
characterized in that  
the concentration of the boron atoms is chosen to be  
25 greater than  $5 \times 10^{20} \text{ cm}^{-3}$ .
4. Bipolar transistor according to one of the preceding  
claims,  
characterized in that  
30 the at least one electrode (1, 2) consists of  
polycrystalline silicon-germanium.

5. Bipolar transistor according to one of the preceding claims,

characterized in that

the at least one electrode is the base electrode (2).

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6. Bipolar transistor according to one of the preceding claims,

characterized in that

the bipolar transistor is a self-aligned bipolar

10 transistor.